

INDIANAPOLIS-MARION COUNTY FORENSIC SERVICES AGENCY

Doctor Dennis J. Nicholas Institute of Forensic Science

40 SOUTH ALABAMA STREET • INDIANAPOLIS, INDIANA 46204
PHONE (317) 327-3670 • FAX (317) 327-3607

Michael Medler
Laboratory Director

EVIDENCE SUBMISSION GUIDELINE #10

FIREARMS EVIDENCE

INTRODUCTION: Although generally encountered in crimes against persons such as assault and homicide, firearms may be found in other types of cases; e.g. burglary, rape or narcotics violations. In addition to bullet and cartridge case comparisons, function examinations, characterization examinations and distance determinations; trace evidence such as blood, hair or fiber may be adhering to exposed surfaces. All of which may yield valuable information to an investigator and his case.

To insure the maximum value of this evidence is obtained, it first must be properly identified, preserved and packaged. These steps should be properly documented by good notes and photographs.

NOTE: Photos must contain a scale to show size.

This bulletin is designed to assist you in these areas. Any situation not sufficiently explained to your specific needs may be handled on an individual basis by contacting the Firearms Examiner or Firearms section supervisor. The main laboratory phone number is (317)327-3670. Please call this number and you will be connected appropriately for consultation.

A. FIREARMS

General considerations and precautions: As important as physical evidence or fingerprints may be, safety is of greater concern. When practicable, always render a weapon safe to handle before proceeding with further investigation or examination, but with caution so as to preserve any possible DNA trace and/or fingerprint evidence that may be present.

1. Unloading the Weapon:

a. Revolvers - If cocked, cautiously uncock the weapon using the knurled areas if possible. Make two marks on the cylinder, one on each side of the top strap, to indicate the chamber that is in the firing position. If uncocked, these marks will indicate the chamber found indexed in front of the firing pin. Your notes should contain the following information:

Appearance of cylinder as recovered:

Marks made each side of top strap

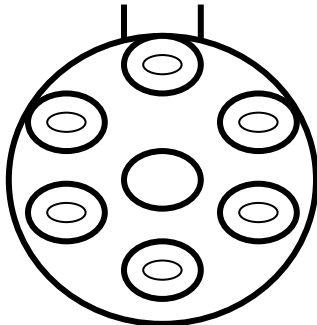
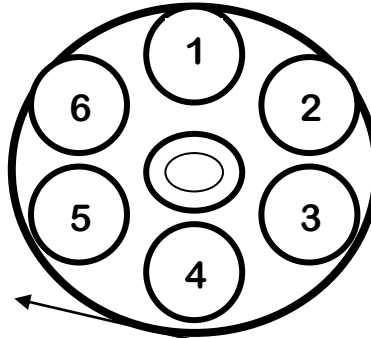
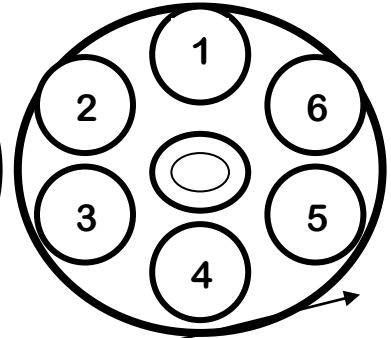


Diagram to be used in notes



Direction of rotation

Diagram to be used in notes



Direction of rotation

Example index card:

Chamber

Position	Condition	Headstamp
#1	Fired	U. S. Cartridge Co.
#2	Fired	Remington Arms Co.
#3	Fired	Winchester Repeating Arms Co.
#4	Unfired	Dominion Cartridge Co.
#5	Loaded	Western Cartridge Co.
#6	Loaded	Peters Cartridge Co.

Fired and unfired cartridges should be individually packaged by placing them in soft tissue or cotton, sealed in a pill box or envelope and pertinent information placed on the container (See Projectiles: General Considerations and Precautions).

If you mark the weapon for identification, do so somewhere on the frame where it doesn't destroy overall appearance (e.g. inside cylinder crane or under grips). As an alternative to engraving on the weapon, use the serial number for later identification. You may also affix a tag to the trigger guard.

- b. Semi-Automatics: Note the positions of any manual safety devices or cocking indicators. Carefully disengage the magazine and remove it from the weapon. Open the action and visually check the chamber for a cartridge or cartridge case. If possible, lock the slide to the rear keeping the action in the opened position, if not, let the action close then engage any manual safety devices that may be on the weapon. (Note: Make sure no live cartridge is left in the chamber).

If you mark the weapon for identification, do so somewhere on a part not readily removable from the weapon. The magazine, if found in the weapon, may be included in the same item as the weapon for submission to the laboratory, however, if it is found not in the weapon it should be submitted as a separate item. As an alternative to engraving on the weapon, use the serial number for later identification.

NOTE: If fingerprinting is requested the cartridges may be left in the magazine but should not be left in the chamber.

- c. Shotguns and Rifles: These are handled in similar manner to the handguns listed above. Safety and preservation of physical evidence should always be considered.

*****NOTE:** All weapons should be submitted to the Property Room or laboratory **unloaded**. The firearm should be properly strapped with a nylon tie for safety.

If a firearm cannot be unloaded or if it is unknown if it is loaded, the contributor shall contact the firearms examiner prior to their arrival at the Property Room or laboratory, so he/she may assist with the firearm.

2. DNA, Trace Evidence and Fingerprints:

After the weapon is in a safe condition, examine it for trace material; i.e. blood, hair, fiber, tissue. If in doubt about proper processing, do not proceed further until contacting the laboratory and discussing the situation with a firearms examiner.

****Rubber gloves and masks should be worn when DNA is collected or fingerprinting is needed. Gloves must be changed with each piece of evidence being handled.

3. Packaging of Firearms and Delivery to the Laboratory:

Personal delivery is the preferred means of transportation to the laboratory. However, if it is impossible to hand carry the evidence to the laboratory the U.S. Mail can be used.

If the weapon must be shipped, it is imperative that it be properly packaged. It should be placed in a heavy corrugated container and secured in place to prevent shifting within the container.

NOTE: Rifles and shotguns should not be dismantled before packaging as this could alter their evidentiary value.

All firearms (both handguns and long guns) shall be packaged upon submittal to the laboratory. Suitable packaging for firearms include: boxes, manila envelopes and paper wrapping. Firearms recovered in water should be submitted in the same water in a watertight container. However, a firearms examiner must be contacted **prior** to submission if it is unknown whether the firearm is loaded.

B. PROJECTILES - GENERAL CONSIDERATIONS AND PRECAUTIONS

Bullets should always be handled with the utmost care to avoid destroying the microscopic striations on the bullet. They should be packed and sealed in a paper envelope or pillbox and the container marked for identification. The bullet **should not** be marked due to the possibility of destroying valuable evidence.

NOTE: Plastic or glass airtight containers should never be used for bullets or firearms. They could allow moisture to cause corrosion of identifiable detail on the bullet, and rust on a firearm. Paper or cardboard should be used.

1. Projectiles Embedded in Wood, Plaster, etc:

Unless absolutely necessary, do not attempt to dig out projectiles. Remove the portion of material in which the projectiles are embedded and submit the entire piece to the laboratory. If practical, remove a section of the material, the projectile or projectiles should be recovered by removing the material, adjacent to the projectile to prevent damage to the evidence. This procedure can be explained in detail by contacting a firearms examiner.

2. Projectile or Projectiles from a Person or Body:

X-rays should be taken to locate the position of the projectile. They should be removed with rubber-tipped forceps or by using just the fingers to prevent mutilation of the projectile. If asked, doctors are usually willing to comply with this request. Caution should be taken as some projectiles have sharp edges.

The projectile should not be rinsed off. Rinsing will be done at the laboratory.

C. CARTRIDGES AND AMMUNITION COMPONENTS

1. Unfired Cartridges:

If relatively few, these should be packaged in the same manner as projectiles. Larger quantities should be grouped together as to location of recovery and may be listed as a single item. The larger quantities may be packaged in cardboard or wooden containers. The containers should then be marked for identification.

NOTE: Postal regulations prohibit shipment of explosive substances through the mail. Live ammunition must be personally delivered to the Property Room or the laboratory.

2. Fired Cartridge Cases:

Should be handled in the same manner as projectiles. Remember that proper packaging prevents the destruction of valuable evidence.

3. Shotshell Wads:

An attempt should be made to locate wads fired from shotshells. When a shotshell is fired, the wad or wads travel along with or behind the shot charge. When located, the shotshell wad or wads should be handled exactly as projectiles.

NOTE: In cases involving relatively close muzzle to target distances, wadding may be found in the victim's clothing or body.

D. DISTANCE DETERMINATIONS

Muzzle to target distance can be invaluable to your case if certain conditions exist. To get the most from this evidence it MUST be properly submitted. The firearm must be recovered and submitted with any unfired cartridges found at the scene.

Clothing should be air-dried before packaging. After drying, clean paper should be placed over each surface. This is to prevent the destruction of evidence by rubbing of other areas of clothing. The clothing should then be individually packaged in clean paper, sealed and marked for identification. When projectiles have passed through a garment or garments, a good photograph of the bullet hole positions in the victim is desirable. A scale should be used in these photos. Always submit all of the unfired ammunition associated with the case, as the use of identical ammunition is an essential part of distance determination.

Any further questions, please call the laboratory at (317) 327-3670.

Evidence Submission Guideline #10 adapted from Indiana State Police Laboratory Physical Evidence Bulletins.

ESG #10
Revised 10/2008

